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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,532	03/31/2004	Walter Fischer	75249-068	3471

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PATENT DEPARTMENT
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EXAMINER

SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,532

Applicant(s)

FISCHER ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-13 and 15-25 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/031,983.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/31/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

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The specification on page 1, line 1 based on the preliminary amendment filed October 8, 2004 does not indicate the status of parent application no. 10/031,983 as U.S. Patent No. 6,759,506.

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-9, drawn to a polymercaptopolyamine of formula Ia or Ib, classified in class 528, subclass 380.
 - II. Claims 10, 12, 13, 15-20 and 23-25, drawn to a composition comprising an epoxy resin and a polymercaptopolyamine of formula Ia or Ib, classified in class 528, subclass 109.
 - III. Claims 11, 12 and 21-24, drawn to a composition comprising an epoxy resin, a polymercaptopolyamine of formula Ia or Ib, and a polyamine, classified in class 525, subclass 523.

The inventions are distinct from each other because of the following reasons:

2. Inventions I and (II or III) are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05(j)). In the instant case, the intermediate product is deemed to be useful as a curing agent for a carboxy-functional polyester and the inventions are deemed patentably distinct because there is nothing on this record to show them to be obvious variants.

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3. Inventions II and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05(j)). In the instant case, the intermediate product is deemed to be useful as an adhesive formulation and the inventions are deemed patentably distinct because there is nothing on this record to show them to be obvious variants.

Restriction for examination purposes as indicated is proper because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification.

4. This application contains claims directed to the following patentably distinct species:

a) The reactants employed in the preparation of the polymercaptopolyamine of formula Ia or Ib such as a dithioglycidyl ether of bisphenol A (specification, page 12, polyepisulfide preparation procedure 1a) and page 14, line 1) and the diethylenetriamine (page 13, DETA) of Example I1 of Table 1 on page 15.

b) Contingent upon the election of Group II, item a) and the epoxy resins such as the diglycidyl ether of bisphenol A used in Application Example II.1 on page 17.

c) Contingent upon the election of Group III, items a) and b) hereinabove and the polyamines wherein a single species is selected from the paragraph bridging pages 10-11.

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The species are independent or distinct because the variety of reactants used to form the polymercaptopolyamine yields materially different structures wherein X is either -O-, -C(=O)O or CHR₄.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species ***within each of items a), and b) or c) if appropriate***, for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, claims 1-25 are generic.

A reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species (MPEP § 809.02(a)).

A telephone call was made to Robert Holthus on April 19, 2006 to request an oral election to the above restriction and election of species requirements, but did not result in elections being made. The reply to this requirement to be complete must include (i) an election of a species and invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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5. New claims 15-20 are supported by original claims 2-7. New claims 21-24 are substantiated by the specification on pages 10-11. Claim 25 limits X of formula Ia or Ib to -O- or OC(=O)O within the species defined in claim 10.

6. Claims 1-9 have been allowed in parent application no. 10/031,983 as U.S. Patent No. 6,759,506 and should be cancelled to avoid a potential double-patenting.

7. The substituent X in formulae Ia and Ib includes the radical $-\text{CHR}_4$ wherein R_3 of the group $-\text{CH}(\text{R}_3)-$ and R_4 together forms an ethylene group according to page 1, the last line; page 2, line 2 and claim 1, lines 8 and 10. However, R_3 and R_4 are separated by the moiety $-\text{C}(\text{SH})(\text{R}_1)-\text{CH}_2-$. How is an ethylene group formed in the presence of the intervening group? Furthermore, the organic substituents encompassed by R_4 alone are not defined.

8. Luhowy et al. Patent No. 3,919,277 exemplifies the reaction of excess methylamine with propylene sulfide (col. 9, Example 6) and the reaction of excess methylamine and 1,7-octadiene-bis-episulfide (cols. 10-11, Example 10). Levine Patent No. 3,548,002 (cols. 2-3, Examples 1-4) shows reaction products of equivalent or excess ethylenediamine or diethylenetriamine with propylene sulfide. Cameron Patent No. 3,394,098 (col. 5, Flexibilizer F) exhibits the reaction of excess ethylenediamine with propylene sulfide. Luhowy et al. (col. 5, lines 45-48) sets forth the conversion of an epoxide to an episulfide via reaction with potassium thiocyanate.

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9. The specification on page 5, the last paragraph, describes the reaction of a (poly)episulfide of formula (IIIa) with amine R_5-NH-R_2 in an amine:episulfide equivalent ratio of from 1:1 to 1:10. Based on the (bis-)episulfide and (poly)amine reactants within the confines of the (poly)episulfide of formula (IIIa) and amine R_5-NH-R_2 reacted in molar ratios within the disclosed parameters, the reaction products of Luhowy et al., Levine or Cameron inherently possess structures within claimed formula Ia or Ib.

10. The burden of proof rests with applicants to demonstrate that the prior art reaction products do not exhibit structures within claimed formula Ia or Ib


(*In re Fitzgerald*, 205 USPQ 594, CCPA 1980 and MPEP §§ 2112-2112.02).

11. None of the cited prior art recite X of formulae Ia and Ib being an oxygen atom or ester group. Claims 15, 16 and 20 require X to be oxygen. More favorable consideration would be given to the limitation of X in independent claim 10 to -O- or $-C(=O)O$ contingent upon the election of Group II and the cancellation of non-elected claims 1-9, 11, 12 and 21-24.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

rs
4/20/2006



ROBERT E.L. SELLERS
PRIMARY EXAMINER